DOCUMENT RESUME

ED 387 592 CE 069 829

AUTHOR Wills, Joan L.
TITLE Preparing Youth for a High Skilled Global Workforce.
INSTITUTION Institute for Educational Leadership, Washington, D.C.
PUB DATE 95
NOTE 18p.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Competence; Corporate Support; *Educational Change; Educational Legislation; *Education Work Relationship; *Federal Legislation; Labor Force Development; National Programs; *School Business Relationship; Secondary Education; *Standards; Vocational Education

ABSTRACT

In large measure, the United States is a country coming from far behind regarding even serious conversations about a national education system. Three pieces of federal legislation passed in 1994 are intertwined in purpose and actions. These include: the School-to-Work Opportunities Act; the Goals 2000: Educate America Act; and within the Goals 2000 legislation Title V establishing the National Skills Standards Act. Each represents capacity building/infrastructure development opportunities and reflects an effort to build and strengthen the base of current institutions while strengthening the links between those institutions in new and different ways. A connecting "lynch pin" of the systemic change strategy embedded in all three pieces of legislation is the development of standards. Goals 2000: Educate America Act defines three types of academic standards: content, performance, and opportunity-to-learn. A major element of the National Skills Standards Act is the creation of the National Skill Standards Board (NSSB). To encourage systematic reforms, the School-to-Work Opportunities Act set out to reverse the current fragmented approach to transition to work. To seize the opportunity, two major categories of tasks need to be addressed: invention and redirection tasks. The invention tasks are the missing links in the U.S. system. Employer involvement through an employer-led and -managed, neutral third-party intermediary organization is essential to building connections between school and work. (Appendixes include lists of where the employer community is needed, redirection and invention tasks, and types of skills.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 387 592

PREPARING YOUTH FOR A HIGH SKILLED GLOBAL WORKFORCE

PREPARED BY

JOAN L. WILLS
U.S.A.

Center for Workforce Development
Institute for Educational Leadership, Inc.
Washington, D.C.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J L WILLS

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

BEST COPY AVAILABLE

CE 069 627

PREPARING YOUTH FOR A HIGH SKILLED GLOBAL WORKFORCE

The Challenge

Many countries are facing a substantial challenge to create sustainable redirection of public and private resources and practices in the preparation of the workforce. According to the Organisation for Economic Co-Operation and Development, (OECD) in a wide array of countries a severe crisis exists in the relationship between educational and economic systems. In many countries:

- √ there is a rise in youth unemployment yet, paradoxically, firms are having recruitment difficulties;
- √ there is growing evidence of transitional problems from the classroom to the workplace affecting even the highly trained young people in many countries; and,
- √ there is a doubt cast over the role of diplomas and certificates young people earn in most countries.[1]

In large measure, these observations reflect a sea change occurring in most economies. The production processes are changing in both manufacturing and services industries. The impact of the information-based technologies are changing the way individuals learn and interact with others in the classroom and the workplace. Jobs that have career growth opportunities are increasingly in organizations with fluid structures requiring all of its workers to have multiple skills and deep knowledge of products, quality control systems, and the requirements of the firms' customer needs.

Coherence between a country's economic agenda and its education preparation system is an essential ingredient for productive growth of its' economy. The impact of these global trends in the workplace is generating a substantial amount of soul searching and change in many countries' education and training systems.

Some common patterns of change in the education and training systems exist in almost all countries. A few of these patterns are:

---

[1]The Changing Role of Vocational and Technical Education and Training, Overview Paper for Seminar Apprenticeship, "Alternance" and Dual System: Dead Ends or Highways to the Future? April 1994, Organisation for Economic Co-Operation and Development, Paris, France

- √ the amount of time for compulsory education has been expanded in many countries in the past twenty years or so;
- √ the definition of academic "basics" has broadened and deepened;
- √ the distinctions between education and training are blurring;
- √ the attainment of post-secondary degrees is increasingly popular with parents, students, and employers; yet classic liberal arts degrees are not sufficient for many occupations and they must be coupled with some sort of formal specialized technical training;
- √ the knowledge gained through applied learning opportunities are valued by both students and employers.

A substantial amount of attention is currently being given to improving the initial vocation and education and training in many countries. While there are widely differing traditions in how countries have organized their vocational preparation programs there have only been a few countries that have kept or developed real "systems." These systems are school based in some countries (Nordic countries, France) or apprenticeship systems in the German-speaking countries. In the Anglo-Saxon countries, apprenticeship has mainly survived in the construction trades; the concentration of effort over the past two decades has been on improving the general and academic education in these countries. Yet large number of young people continued to enter the labor market without recognized qualifications.[2] (If a developing country was a previous colony of one of these countries their education and training system generally reflect the same pattern of the colonizing country).

Comparative studies concentrating on the work organization and efficiency in the 1970s and 80s noted causal relationships between training and greater competitiveness. A recent study in the United States confirmed such findings. A survey of employers revealed that employers believe such increases in workers' educational levels produced twice the gains in workplace productivity than did capital investments. The study noted that a 10 percent increase in workers' educational attainment generated an 8.6 percent rise in average productivity. While the same 10 percent increase in capital goods raised productivity by 3.4 percent[3].

One result of such comparative studies is that education and training systems of the German-speaking countries and Japan begin to receive a great deal of international attention. While the relationship between the education system and the employer community is substantially

---

[2] Ibid.

[3] National Center on the Educational Quality of the Workforce (EQW) National Employer Survey, Summer 1995, University of Pennsylvania, Philadelphia, Pennsylvania

different between Japan and the German-speaking countries, they have a common thread regarding the expectations of the employers to carry a substantial role in the technical preparation of the workforce. These economic competitiveness links attracted the attention of politicians and the employer community. Pressures to change the education system in the countries that felt they were behind the world leaders became intense. This was clearly true in the United States. With German Marshal Fund support, national and state delegations visited Germany and other European countries throughout the 1980's. By the beginning of the 1990's these visits generated a strong influence on the U.S.'s response to education reform.

The decade of the 1980s was a period of experimentation in the countries who were "behind." For the Anglo-Saxon countries, the partnerships established with companies encountered several problems, , in part due to the decentralization of the education system and the weak organization of the employer community itself. Additionally, the relative low commitment of unions has meant there has been a substantial amount of difficulty in developing anything resembling a coherent system.

OECD uses the term "alternance" to mean learning in the work environment as a part of formal education. It is not clear whether the formal apprenticeship model or another form of cooperative teaching and learning will be judged to be the most effective for the new economy. What is clear is that this is a time of rich experimentation and alterations in the way young people will be learning to compete in the global economy.

An example of the importance of the crises observed by OECD and others can be found in a decision made by the European Union (EU). As many of you may be aware, the EU is providing technical assistance and fiscal support to the Eastern European Countries on a wide range of issues. Vocational preparation is the only issue area that a decision was made to establish a new permanent foundation to direct the effort. For me, this is just one more indicator of the international seriousness of the challenge almost all countries are facing regarding the need to assure their young people are prepared for the new and rapidly changing global workforce. No country can rest on the laurels of the past.

The United States — A "Systems Building" Experiment

In large measure the United States is a country coming from far behind regarding even serious conversations about a national education system. We have emotionally long cherished the independence of our 15,000 plus local school districts. We have tolerated only minimal oversight by the fifty states. We have always eschewed any central federal control over any part of the education system, though there has always been strong federal control over job training programs. Perhaps it is due to our separation of powers "fetish" that we have fallen into the pattern of having the federal government essentially only fund discretionary programs. Some would say we have created a program for every problem. The proliferations of programs without any overarching framework to judge their effectiveness has helped cause some of the current political backlash in the U.S. today.

The 1980s was a period of "think tank" reports and soul searching by political leaders at the state and national level. The voices of the business leaders kept up a steady drumbeat that young people were ill-prepared for the jobs required in the new economy. For the first time in our history the conversations and debate began to center on "systemic change" efforts.

In 1994 there were three pieces of federal legislation approved which are intertwined in purpose and actions. These include the passage of the School-to-Work Opportunities Act (STWO) of 1994, the promotion of national education reform through Goals 2000: Educate America Act, and within the Goals 2000 legislation Title V established the National Skills Standards Act. Each represent capacity building/ infrastructure development opportunities. Each reflects an effort to build and strengthen the base of current institutions while strengthening the links between those institutions in new and different ways. (It must be noted we are witnessing a great deal of political rhetoric to judge them unsuccessful before they have really begun to be launched). Yet, if successfully combined, these efforts will eventually change the intergovernmental system in the country. Additionally, and hopefully, success will restore faith in many of our public and private institutions that is so sorely lacking by the citizenry. In other words, the stakes are high.

The three pieces of legislation do not mandate any specific requirements to be placed upon any state or locality. They build upon the "American Way" of promoting change through voluntary actions. A connecting "lynch pin" of the systemic change strategy embedded in all three pieces of is the development of standards.

Why Standards?

Standards help ensure quality, indicate goals, and promote change. Standards facilitate: 1) communications, 2) protection, 3) harmonization, 4) simplification and 5) valuation.

The decentralized governance system and reliance upon a multitude of public and private institutions to assist in education and training in the United States generates substantial communication challenges. The development of standards helps to address this "boundary impediment." It is the hope that using standards as a tool can link the respective strengths of all the institutions engaged in the business of helping young people prepare for work.

ACADEMIC STANDARDS

Goals 2000:Educate America Act establishes voluntary national education goals to promote coherent systemic education reform and to clearly define federal, state, and local responsibilities. Work has already begun regarding what students should know upon leaving grades 4, 8, and 12. The Bush Administration launched the effort to develop academic standards in a range of disciplines such as science, mathematics, English, geography, arts, history, and civics by funding professional organizations representing these disciplines. There have been criticisms of this effort, but there must be some value to it because 47 out

of the 50 states are using the standards as a benchmark for their own work.

The Goals 2000 legislation defined three types of standards:

- √ *content standards* refer to the "broad descriptions of the knowledge and skill students should acquire in a particular subject."

- √ *performance standards* are "concrete examples and explicit definitions of what students have to know and be able to do to demonstrate that such students are proficient in the terms and knowledge framed by content standards."

- √ *opportunity-to-learn standards* are "the criteria for, and the basis of assessing the sufficiency or quality of the resources, practices, and conditions necessary at each level of education systems (schools, local education agencies, and States) to provide all students with an opportunity to learn the material in voluntary national content standards."

The third type of standard, opportunity-to-learn, has been the most controversial from the very beginning of the legislative debate. It was not supported by the Clinton Administration or most political and educational leaders in the states; it was however supported by the then Democratic leadership in Congress and many education reform advocates. With the arrival of the new Republican leadership in Congress this language is being stripped from the books. In keeping with our traditions, it is considered too intrusive over the local control of the schools.

SKILL STANDARDS

A major element of the National Skill Standards Act is the creation of the National Skill Standards Board (NSSB). The Board's mission is ambitious. The Board is to construct a voluntary system of skill standards in such a fashion that nearly all institutions concerned with worker skills would eventually be affected. Key tasks of the NSSB include:

- √ Identify broad occupational clusters for skill standards around which to organize the voluntary system;

- √ Recognize Partnership Bodies (the tripartite membership organizations of business, union and government that are to set the standards for broad occupational clusters); and,

- √ Establish objective criteria for purposes of endorsements.

Standards are to:

- √ provide credentials (through formal assessments);

- √ be used by institutions of higher education, employers, trade associations, unions; and,

- √ be used by School-to-Work programs explicitly.

One of the NSSB's first assignments is to establish the broad occupational clusters within which skill standards will be developed. There is a clear concern that the clusters must be sufficiently broad so that individuals do not become "trapped" in narrow, job specific training programs. There needs to be opportunities for individuals to map a course of career growth across several different job settings within the cluster and across clusters. The clusters are to be able to adapt to "future jobs" as new ones emerge and others fade away.

The Bush Administration did the preliminary work for a national system to promote the voluntary use of skill standards. The Departments of Labor and Education funded 22 pilot projects which could potentially cover approximately 19 percent of our total occupations. These knowledge-development projects are still underway and some will continue through 1996.

The pilot projects are beginning to make distinctions between several different types of skill standards: *core academic, generic workplace readiness, industry core, occupational family, and occupational (or job) specific.*

- √ Core academic standards cover those subject matter areas, such as math, language arts, and science, that are necessary for functioning as a member of society and help develop career-related skills.

- √ Generic workplace readiness standards cover those generic skills and qualities that workers must have to learn and adapt to the demands of *any* job. These include personal attributes, interpersonal skills, thinking and problem-solving, communication, academic foundations, and use of technology as key to the success of workers in the future workplace.

- √ Industry core standards apply to all, or nearly all of the occupations in a particular industry. Thus, there are core standards for the hospitality industry that are distinct from core standards for the electronics industry. This first layer of industry-specific standards helps to ensure that students and workers have a solid foundation in their industry of interest and is therefore critical to career-preparation programs.

- √ Occupational family standards specify the knowledge and skills that are common to a related set of occupations or functions within an industry. For example, within the health care industry, occupations in medical laboratory, imaging, and radiography can be thought of as belonging to a larger diagnostic family (or cluster) of occupations. The occupations in this

diagnostic family share a focus on creating a picture of patient health at a single point in time. Whereas individual job-specific requirements may change, depending on changes in the job market as well as changes in the structure of the workplace, occupational family level standards provide a broader base of skills for individuals. These broader standards help ensure that workers have the requisite skills to adapt to such changes and are better prepared for making vertical and horizontal changes in their career paths.

√ Occupational or job specific standards address the skill expectations of a specific occupation. Many existing career-preparation programs and certification systems focus at this level .

SCHOOL-TO-WORK

Unlike many youngsters in other industrialized countries, American youth who do not attend college are largely on their own in making smooth connections to the workplace. For many, the years that follow high school have been periods of lost productivity for employers and turmoil for the young adult who changed jobs frequently. Employers complained that high school dropouts and graduates alike were ill-prepared for entry level jobs.

In the 1980s, government- and foundation-supported demonstrations to improve the transition to work were launched. Many of these demonstrations were based on European models of apprenticeship systems. The innovations of the 1980s were small efforts that could not go to scale without action by government. However, many recognized that new apprenticeship programs would only add to the number of programs available. The issue became how states and localities could build upon the current array of education and training programs? In other words, it was not possible to totally lift another country's system and replace everything that had been built over years.

To encourage systemic reforms, the School-to-Work Opportunities Act set out to reverse the current fragmented approach. The Act is jointly administered by the Departments of Education and Labor, another first for the United States. Strategies to offer school-based learning connected directly to work-based learning are envisioned for all students, not just those in vocational education.

The opportunity is to shorten the preparation time it takes students to become proficient and career directed workers; to blend and focus the academic and contextual learning processes for career preparation for all students, regardless of the setting where knowledge and skills are attained; to establish value-added credentials for both the worker and the employers to use; to create more efficient mechanisms for employers to communicate knowledge requirements to both workers and educators; and to enhance economic competitiveness of communities as well as public and private enterprises.

To seize the opportunity, two major categories of tasks need to be addressed. These are

invention and redirection tasks. The invention tasks are the missing links in the U.S. system.

Invention Tasks include:

- √ using the tool of standards to identify a knowledge and skills taxonomy(ies) that promotes communications among all the stakeholders;
- √ developing programs of study that can be used in a wide array of learning settings, but most specifically the workplace;
- √ developing portable credentials that are recognized by employers, education institutions, and valued by the individuals;
- √ selecting the measurement and metrics with which process, progress and outcomes can be tracked and value-added judged; and,
- √ enabling and supporting the development of employer networks that provide the work-based learning opportunities and promote the use of national credentials et.al..

Redirection Tasks

There are a substantial number of tasks requiring either the change of policy and practices or reallocation of funds that must be tackled. These include:

- √ developing comprehensive and sustainable professional development opportunities;
- √ establishing goals and benchmarks for state and assisting localities to do the same;
- √ reorganizing, if necessary, substate delivery systems;
- √ reorganizing high schools, including the allocation of time;
- √ redesigning articulation agreements between education and training providers; and,
- √ integrating academic and applied curriculum.

These two lists represent substantial challenges and given the political climate currently afloat in the U.S. one could have total despair that anything could be accomplished. There is another view, however, one to which I subscribe. That is: the timing is right. The

advocates have done their homework. The business leadership organizations are committed to helping. And the fiscal constraints placed on the education and training programs demand collaboration in new and different ways.

Two of the tools, the Program of Study and the Portable Credentials, represent legislatively, important breakthroughs within our intergovernmental system. For the first time in our history, there is a national recognition that it is necessary to focus on knowledge and skills needed in the workplace as the key way to organize the activities at the local level.

The program of study is to link the academic and vocational content together; it is to be organized around career majors for occupations and through a coherent sequence of courses that ignore boundaries institutions (e.g., high school and community college and/or community based organizations.) The programs are to delineate what is to be learned in the workplace and how that learning relates to what occurs in the classroom; and, the programs of study are to incorporate the knowledge and skill requirements of industry that have been validated nationally. In other words the program of study is a serious tool.

The skill certificate is defined as "a portable, industry-recognized credential" which certifies that a student has mastered levels that are at least as challenging as skill standards endorsed by the National Skill Standards Board. Until the NSSB has national standards in place, the states will use their own process for issuing a credential.

Creating the programs of study and developing new forms of portable credentials will require a substantively different role and level of involvement of the employer community than we have ever had in the U.S..

Engaging the Employer Community

An important lesson learned by U.S. policymakers in their visits to other countries is the necessity of engaging the employer community in different ways. The U.S.tradition has been to have a few individual employers sit on local advisory committees, sometimes ask them for money, and solicit job placements for young people in a temporary job. There has been little expectation that learning outcomes of any significance would result. Indeed, many teachers and administrators in schools have long considered the work-based learning programs as a "dumping ground" for difficult students.

In many parts of the country it is necessary to build employer-based networks from the ground up simply because, for all practical purposes, they do not exist or are in their infancy. A growing number of communities are developing a neutral third party intermediary organization that is employer led and managed which preform at least several of the following functions:

- √ identifying work-based learning opportunities in all industrial sectors;

- √ brokering placement, mentoring, and learning services between education and training providers and individual employers;

- √ assisting in the preparation of marketing and information materials for the program geared to the employer community;

- √ providing a conduit for development and support of career focused education and training opportunities; and,

- √ providing a conduit for working with industry specific national, state and local associations in the development of curriculum and portable credentials.

There is no one "best model" for such organizations; yet such an organization is essential to building connections between school and work. These third part intermediary organizations build ownership with one of the most critical stakeholders in the community. They have credibility because they lay outside any one public education and training organization.

Currently, the last point in this list -- the conduit function is truly in its embryonic stages. The local employer-led organizations that do exist are loosely tied into one or more national employer based organizations. However, considerably more work must be undertaken to establish anything approaching an employer based national infrastructure tied to the development of skill standards, curriculum development, and issuance of the portable credentials. However, there is a growing convergence of effort by key national employer based organizations to help build these networks.

One of the key parts of such a network will be the Partnership Bodies recognized by the NSSB that will have the lead responsibilities to validate the knowledge and skill requirements and participate in the issuance of the portable credentials. Yet these Partnership Bodies will need to work with organizations involved in the more specific tasks of promoting the school-to-work efforts. Attention must be given to developing the curriculum, working with state governments on several tasks and various other activities that will be required to make work-based learning a key feature of the way all young people learn in the U.S.

A final note

Much work clearly remains to be done in the U. S. before our young people are prepared for jobs in the global economy. Clearly, we are not alone and need an ever increasing number of opportunities for individuals across international boundaries to learn and share with one another.

THE FOLLOWING PAGES SHOULD BE TURNED INTO VISUALS

THE EMPLOYER COMMUNITY --- WHERE THEY ARE NEEDED

- √ IDENTIFYING WORK-BASED LEARNING OPPORTUNITIES IN ALL INDUSTRIAL SECTORS;
- √ BROKERING PLACEMENT, MENTORING, AND LEARNING SERVICES BETWEEN EDUCATION AND TRAINING PROVIDERS AND INDIVIDUAL EMPLOYERS;
- √ ASSISTING IN THE PREPARATION OF MARKETING AND INFORMATION MATERIALS FOR THE PROGRAM GEARED TO THE EMPLOYER COMMUNITY;
- √ PROVIDING A CONDUIT FOR DEVELOPMENT AND SUPPORT OF CAREER FOCUSED EDUCATION AND TRAINING OPPORTUNITIES; AND,
- √ PROVIDING A CONDUIT FOR WORKING WITH INDUSTRY SPECIFIC NATIONAL, STATE AND LOCAL ASSOCIATIONS IN THE DEVELOPMENT OF CURRICULUM AND PORTABLE CREDENTIALS.

REDIRECTION TASKS

- √ DEVELOPING COMPREHENSIVE AND SUSTAINABLE PROFESSIONAL DEVELOPMENT OPPORTUNITIES;
- √ ESTABLISHING GOALS AND BENCHMARKS FOR STATE AND ASSISTING LOCALITIES TO DO THE SAME;
- √ REORGANIZING, IF NECESSARY, SUBSTATE DELIVERY SYSTEMS;
- √ REORGANIZING HIGH SCHOOLS, INCLUDING THE ALLOCATION OF TIME;
- √ REDESIGNING ARTICULATION AGREEMENTS BETWEEN EDUCATION AND TRAINING PROVIDERS; AND,
- √ INTEGRATING ACADEMIC AND APPLIED CURRICULUM.

INVENTION TASKS INCLUDE:

- √ USING THE TOOL OF STANDARDS TO IDENTIFY A KNOWLEDGE AND SKILLS TAXONOMY(IES) THAT PROMOTES COMMUNICATIONS AMONG ALL THE STAKEHOLDERS;

- √ DEVELOPING PROGRAMS OF STUDY THAT CAN BE USED IN A WIDE ARRAY OF LEARNING SETTINGS, BUT MOST SPECIFICALLY THE WORKPLACE;

- √ DEVELOPING PORTABLE CREDENTIALS THAT ARE RECOGNIZED BY EMPLOYERS, EDUCATION INSTITUTIONS, AND VALUED BY THE INDIVIDUALS;

- √ SELECTING THE MEASUREMENT AND METRICS WITH WHICH PROCESS, PROGRESS AND OUTCOMES CAN BE TRACKED AND VALUE-ADDED JUDGED; AND,

- √ ENABLING AND SUPPORTING THE DEVELOPMENT OF EMPLOYER NETWORKS THAT PROVIDE THE WORK-BASED LEARNING OPPORTUNITIES AND PROMOTE THE USE OF NATIONAL CREDENTIALS ET.AL..

TYPES OF SKILLS

- √ **CORE ACADEMIC STANDARDS COVER THOSE SUBJECT MATTER AREAS, SUCH AS MATH, LANGUAGE ARTS, AND SCIENCE, THAT ARE NECESSARY FOR FUNCTIONING AS A MEMBER OF SOCIETY AND HELP DEVELOP CAREER-RELATED SKILLS**

- √ **GENERIC WORKPLACE READINESS STANDARDS COVER THOSE GENERIC SKILLS AND QUALITIES THAT WORKERS MUST HAVE TO LEARN AND ADAPT TO THE DEMANDS OF *ANY* JOB**

- √ **INDUSTRY CORE STANDARDS APPLY TO ALL, OR NEARLY ALL OF THE OCCUPATIONS IN A PARTICULAR INDUSTRY**

- √ **OCCUPATIONAL FAMILY STANDARDS SPECIFY THE KNOWLEDGE AND SKILLS THAT ARE COMMON TO A RELATED SET OF OCCUPATIONS OR FUNCTIONS WITHIN AN INDUSTRY**

- √ **OCCUPATIONAL OR JOB SPECIFIC STANDARDS**

THE CHALLENGE

FOR MANY COUNTRIES

- √ **THERE IS A RISE IN YOUTH UNEMPLOYMENT YET, PARADOXICALLY, FIRMS ARE HAVING RECRUITMENT DIFFICULTIES;**

- √ **THERE IS GROWING EVIDENCE OF TRANSITIONAL PROBLEMS FROM THE CLASSROOM TO THE WORKPLACE AFFECTING EVEN THE HIGHLY TRAINED YOUNG PEOPLE IN MANY COUNTRIES; AND,**

- √ **THERE IS A DOUBT CAST OVER THE ROLE OF DIPLOMAS AND CERTIFICATES YOUNG PEOPLE EARN IN MOST COUNTRIES.**